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## Abstract

In spite of serving as the purported goal of the Global Production Network (GPN) approach, development has been left undefined in the GPN literature, with 'GPN 2.0' now offering an impoverished understanding of development. This article reviews the elaboration of the 'core concepts' of the GPN approach: value, power, embeddedness – and development. I argue that the dis/articulations perspective is useful in offering a critical interrogation of d/Development, and that this has implications for value, power and embeddedness. Dis/articulations takes the determination of value into account and highlights the role of borders and discursive boundaries in structuring power relations.

## **I. Introduction**

Building on and responding to the Global Commodity Chains (GCC) and Global Value Chains (GVC) literature, the Global Production Network (GPN) approach offers a lens through which to analyse the globalisation of production, guided explicitly by a concern for 'developmental consequences' (Henderson et. al. 2002:457). Yet in spite of this normative concern, the GPN literature has largely failed to theorise and conceptualise development, and the recently proposed 'GPN 2.0' instead leaves us with an impoverished notion of development. If we take seriously the GPN school's claim that the analysis of globalising capital is intimately linked to the analysis of economic development, then we need to treat the concept of development seriously. Given recent calls to bring economic geography into conversation with development geography and development studies (e.g. Murphy 2008; Vira and James 2011; Pollard et. al. 2016; Horner 2014), bringing critical perspectives on development to bear on the GPN literature would appear to be a useful endeavor. I therefore argue for engaging with the dis/articulations perspective proposed within the GVC framework by Bair and Werner (2011a). Premised on a critical understanding of development, this approach appears promising for

considering the nature of globalising capital with its varied, contradictory, and dynamic effects in relation to development.

Below, I briefly outline the evolution of the GPN framework and discuss each of the three key concepts stated as core to the approach (focusing on value). I then turn to discussing the concept of development. While there is much more to say about each of the concepts, I hope to sufficiently demonstrate that they are subject to varying levels of ambiguity and/or contradiction within the GPN literature and, crucially, that the belated definition of development offered as part of 'GPN 2.0' is deeply inadequate. I then present the dis/articulations framework, paying particular attention to the understanding of development reflected within this emerging literature. I argue that for three reasons, it offers greater possibilities for the analysis of globalising capital in relation to development. First, it is premised upon a critical understanding of d/Development. Second, it actively theorises borders. Third, it allows for the role of discursive and conceptual boundaries.

## **II. Core concepts of the GPN approach**

### *1. Evolution of the GPN framework*

The GPN framework centres on the organisational fragmentation and spatial dispersion of production. While GCC analysis initially focused on manufacturing, the GCC/GVC/GPN literatures have all expanded their objects of analysis, with the GPN school arguably at the forefront of this trend. A greater diversity of economic actors, products and sectors have come into view, e.g. commodity traders (Gibbon, 2001) and extractive industries (Bridge, 2008). Labour relations have also come to the fore (e.g. Smith et al., 2002; Cumbers et al., 2008; Posthuma and Nathan, 2010; Barrientos et al., 2011a; Rainie et al., 2011; Lund-Thomsen et al.,

2012; Coe and Hess, 2013; *Author*, 2013; Wad, 2013; Stringer et al., 2014; Azmeh, 2014; Taylor, et al., 2013), including the role of labour market intermediaries (Barrientos, 2013; Picherit, 2009; Coe et al., 2007; Coe et al., 2008). Different moments in the realisation of value have also been recognised as integral to GPNs: transportation, distribution and logistics (Rodrigue, 2006; Jacobs et al., 2010); retail and consumption (Hughes et al., 2008); and disposal, recycling and reuse (Lepawsky and Mather, 2011; Brooks, 2013; Crang et al., 2013). Financialisation – the ‘defining characteristic’ of the world economy’ – has also been shown to be interdependent with the fragmentation and dispersion of production (Milberg, 2008; see also Coe et al., 2014). Whereas GCC and GVC analyses tend to emphasise relations among firms (particularly ‘vertical’ relationships between buyers and suppliers) – with these in turn understood as located within an ‘institutional context’ (Gereffi, 1995) – the GPN approach seeks to move away from the chain metaphor employed in the GCC and GVC frameworks and to incorporate non-firm actors. In principle, the GPN approach therefore means accounting for the possibility that non-firm actors (e.g. government agencies, unions, consumer groups, trade associations, religious groups, etc.) may be actively involved in stimulating, shaping or disrupting production. Rooted in economic geography, the GPN approach also proposes a more multi-scalar approach and one which advances understandings of territoriality.

As these different actors and relations have been incorporated, a richer representation of the myriad and multiscalar relations enabling production has arguably emerged. Yet the GPN approach also distinguishes itself from the GCC and GVC frameworks through its orientation around three core concepts: value, power and embeddedness (Henderson et al., 2002). To varying extents, however, these concepts have suffered from ambiguity and/or contradictory

interpretations among different scholars. Some of this may be blamed on the fact that the GPN lens has been predominantly treated as a 'heuristic framework' (Coe et al., 2008), one which can be applied within diverse theoretical perspectives. Indeed, critics have complained that this 'elasticity' means that GPNS are 'defined vaguely' and fail to 'exclude any form of organisational link, transfer, (or) social connection,' but rather include 'just about everything' and therefore lack 'analytical boundaries' (Sunley, 2008). Responding directly to these critiques, Coe and Yeung (2015; see also Yeung and Coe, 2015) have recently proposed 'GPN 2.0' which purports to offer a theory of GPNs and which strives for conceptual clarity.

Yet the critique I wish to offer here is a different one: that the GPN school has consistently articulated development as a core concern but failed to treat it as a 'core concept.' GPN 2.0 not only fails to remedy this flaw but takes a step in the wrong direction, leaving us with an impoverished notion of development; this has implications for the understanding of value, power and embeddedness.

## *2. Value*

Here I wish to briefly revisit each of the three concepts stated as central to the GPN approach – value, power and embeddedness – as well as the concept of development with which GPN analysis is purportedly concerned. I hope to demonstrate that the elaboration of these concepts has suffered from ambiguity and contradiction. I focus on value as it is arguably the most problematic. Indeed, Pickles et al. argue that 'much – if not all – of this research works with quite limited theories of value, of capital accumulation, and their relationship to changing spatial divisions of labour' (2016:27).

The GPN approach is concerned with the creation, enhancement and capture of value. Yet the fundamental question of what value *is* seems to lurk in the background of the GPN literature. Two very different types of value are referenced: the Marxian concept of surplus value, and the ‘more orthodox’ one of economic rent (Henderson et al., 2002; Coe and Yeung, 2015). These two conceptualisations of value are situated in radically different theoretical traditions. They imply irreconcilably different understandings of what value is, how it is reflected in prices, and the normative consequences of this. The fact that they are in tension (to say the least) has not been substantively explored.

The first problem, then, is that the two concepts should not be used interchangeably. The Marxian concept of surplus value (in relation to use value, exchange value, abstract labour, etc.) seeks to illuminate the centrality of exploitation: capital exploits labour through paying workers less than the value of what they produce (having forced them into a position in which they are compelled to sell their labor). Orthodox economics, in contrast, obfuscates this dynamic by asserting a belief that prices determined in markets (for goods and services as well as, crucially, labour) produce optimal outcomes for society; the simple ‘theory’ of value here starts from the premise that on the whole, goods are valued in as much as they will be paid for by consumers and create profit for firms (or paid for by employers and accepted as adequate reward by workers).

The second problem, then, is a failure to interrogate or adapt the categories imported from economics. According to orthodox economics, one of the key ways that firms are able to compete is through obtaining or developing rents based on exclusionary access – e.g. through technology, innovation, etc.. Coe and Yeung therefore list a number of ‘exogenous rents’ such

as ‘preferential access to natural resources,’ ‘favourable government policy,’ infrastructure, and financial systems (2015:16). Yet if GPNs include non-firm actors, treating these rents as *exogenous* is questionable, since national and sub-national governments, banks and other actors actively ensure such exclusionary access. More fundamentally, such rents are held to represent the *creation* of value when they arguably result from political processes in which value is *transferred* to firms (see Levy 2008).

I would also wish to suggest, however, that there is much to learn about value beyond these two (irreconcilable) conceptualisations<sup>i</sup>. For they are both are premised on the idea that an objective measure of value exists, and that prices are an (imperfect) reflection of this value<sup>ii</sup>. For example, while the difficult task of accounting for profit and its distribution within Global Financial Networks is incredibly useful, Coe et. al. treat this as a measure of value (Coe et al. 2014). Profit and its distribution, however, are also determined by other factors (see Dörny, 2016). Levy, for example, points to the ‘cultural and political institutions that constitute the social value of brands and legitimate and enforce intellectual property rights’ as underpinning market power (Levy 2008:958). I would suggest, therefore, that GPN analysis might productively attend to the *determination* of value through a more open and expansive understanding of value and valuation. As Lee has argued, ‘the economic’ is ‘constituted through multiple social relations and conceptions of value’ (2006:413). Rather than seek an objective, underlying measure of value, it may be more relevant to explore the ‘complex struggles’ (Taylor 2007:537) through which economic value is constituted.

This can be illustrated with reference to the value of labour. From a Marxist perspective, the value of labour is the cost of its social reproduction – the amount required for the workforce to

be reproduced such that workers remain available to provide labour power. But we know that work is also assigned (or denied) value in gendered and racialized ways. The 'nimble fingers' thesis, for example, demonstrated that women are discursively constructed as well suited for particular forms of work, leading to lower rates of pay and in turn influencing decisions about where and how to set up production within fragmented GPNs (Elson and Pearson 1981; Pearson 1998; see also Werner 2012). Commodified labour may therefore be devalued to the extent that it is still seen as carrying the traces of non-commodified, non-valuable labour; conversely, the values placed on non-commodified labour influence and are influenced by the economic value it commands in labour markets.

The cost of social reproduction further depends on the differential arrangements by which labour, income, credit, goods and services are provided by combinations of waged workers, (unpaid) family and community members, state agencies, charitable institutions, patronage networks, etc. The contribution of forms of unwaged labour to the social reproduction of waged workers is therefore an articulation between capital and its (close) outside (see below). It is furthermore affected by whether some members of the community are removed from networks of production and reproduction through imprisonment, or their contributions to social reproduction disrupted through detention and/or deportation. What counts as an adequate level of social reproduction also varies, as most starkly illustrated by varying life expectancies of different groups (including waged workers) in different locations (in turn the subject of class struggle). All of this is powerfully structured by race, caste, gender, and migration (with deep historical roots) such that persistent wage gaps and differential access to regulatory protection persist around the world. The value of labour therefore varies widely.



Processes of valuation and devaluation are also evident in the dispossession and destruction which frequently accompany commodification. Marx labelled the process by which workers were 'freed' of the means of production through violent removal from the land (and thus compelled to sell their labour power) as primitive accumulation. This has not been confined to a single historical instance, but rather is an integral and recurrent feature of capitalism (Miles, 1987; Blackburn, 1997; Harvey, 2003; De Angelis, 2001, 2007). Contemporary 'land grabs' which make available to capital large areas of land discursively constructed as marginal, unused or undeveloped – often in spite of competing claims by communities who have a presence on the land – are an illustration of this (see Wolford et al., 2013). So is the frequent expectation that traditional livelihoods, and the cultures within which they are embedded, should make room for infrastructural development projects (e.g. on the Belo Monte dam, Hall and Branford, 2012; Jaichand and Sampaio, 2013). Analogous questions must be asked about processes of value determination in other spheres, such as the privatisation of public goods (e.g. water) and services (e.g. electricity; refuse collection) to illuminate how these may be undervalued and/or transferred rather than 'captured.' These and other processes of dispossession which *remove, destroy or violently transfer* sources of value – including re-valuations which bring about foreclosures, land expulsions or privatisation – are therefore part and parcel of commodification and marketization processes (e.g. Bair and Werner 2011a).

The myriad other ways in which distinct modes of production may be articulated – that is, productively linked to each other (Miles, 1987)<sup>iii</sup> also problematize efforts to distil and/or measure it. To illustrate, those whose livelihoods are not primarily constructed upon wage labour but need some cash income (subsistence farmers, for example, and/or those subject to

directly dependent exploitation such as sharecropping) may be linked to international markets through commodity traders. These communities would thus be linked to GPNs (and indeed exploited by capital) without fully experiencing dispossession; in fact, their ongoing participation in commodity trading may actually be *dependent on* the reproduction of diverse livelihoods (see also Kelly 2009). I am not suggesting that we revisit debates around the articulation of modes of production but rather that the essential insight be retained: capitalism is 'constantly infused by its putatively "non-capitalist" exteriors' (Castree, 1999:141). This has profound implications for the study of value.

Finally, not only can value be destroyed but can also reappear from the ashes, as illustrated in works on waste (Lepawsky and Mather 2011; Crang et al. 2013). In these examples of revaluing that which was considered waste, livelihoods (often precarious ones) are created or sustained in the Global South through engagement with GPNs, but in ways which do not fall neatly within the GPN approach's formulation of value creation, enhancement and capture.

All of these dynamics show how the notions of (exchange) value creation, enhancement and capture in GPNs can belie processes in which these involve the destruction of resources, the (enforced) transfer of value from one set of actors to another<sup>iv</sup>, or even the re-valuing of that which was considered without value. More fundamentally, value can be seen as socially, politically, historically, geographically, and discursively determined. The indeterminacy of value has implications for how we understand value creation, enhancement and capture. If value is not an objective measure, then the *determination* of value must be interrogated prior to any identification of how much of it is captured by whom.

### 3. *Power*

The second key concept in the GPN approach is that of power. GCC and GVC analyses have elaborated notions of governance, in particular highlighting the influence that lead firms exert over the organisation of chains (e.g. what components are produced, where and how these are brought together to produce a sellable product). Initially distinguishing between buyer-driven and supplier-driven chains, the task more broadly involves examining the nature of inter-firm relationships.

Empirically, GPN scholars examine networks rather than chains. As Gibbon points out, governance has largely been conceptualised in the GVC literature as involving only firms; ‘agents, formal institutions and normative systems external to these firms and their actions, but bearing on them,’ however, ‘could and should have been considered as components of chain governance systems’ (2008:38). Ponte and Sturgeon have argued that governance may be ‘multipolar’ (2014): this is a founding premise of the GPN approach. And while Ponte and Sturgeon admit that they do not address how governance is ‘mutually constituted by broader institutional, regulatory and societal processes’ (2014:197), this exactly one of the key limitations that the GPN approach is meant to address through its inclusion of non-firm actors. Conceptually, the specification of power rather than governance as one of the three core concepts of the GPN approach signals in principle that governance *always* implies the exercise of power. With Gereffi et al.’s suggestion that product characteristics and transaction costs (along with ‘supplier capabilities’) determine which forms of governance come to characterise relations between buyers and suppliers in GVCs (2005), the notion of *governance as drivenness* has largely given way to a notion of *governance as coordination*. While the former clearly depends on the exercise of power, the latter is depicted as a technical matter (Gibbon, 2008).

The empirical and conceptual distinctions - networks rather than chains, and power rather than governance - are linked: Hess argues that the GPN approach implies a *networked* conception of power as a profound theoretical move (2008).<sup>v</sup> The exercise of governance by firms in relation to other firms is only one aspect of the multiple, interacting and changing power relations that constitute GPNs.

Some works do seek to better theorise power in GPNs by identifying particular modalities of power being exercised (e.g. Raj-Reichert, 2013). Yet it still tends to be governance (or power) exercised by lead firms at the centre of the analysis. Rarely have GPN analyses been able to tease out which actors govern each aspect of production (marketing strategy, quality standards, labour control, social and environmental practices, etc.) and how they do so (for even lead firms may govern each of these aspects to varying degrees and in very different ways) and the network consequences. A networked conception of power would thus mean uncovering the *many* forms of power relations that characterise the *multiple and intertwined* relations of networks – violence here, seduction there, authority elsewhere, depending on which aspect of production is being governed in which location and at what moment. GPN analysis is thus still faced with the challenge of illuminating the complex and dynamic nature of power relations among the multiple actors through which production is enabled.

#### 4. *Embeddedness*

The third concept is that of embeddedness. Hess (2004) employs and adapts the concept of embeddedness to highlight the ways that relations within networks become stable (network embeddedness) as well as the spatial influences of how these networks function, e.g. where actors are from (societal embeddedness) and where they operate (territorial embeddedness).

Here GPN analysis again attempts a corrective to the thrust of the GCC and GVC schools which, in underscoring the increasing mobility of capital and dispersion of production, risked exaggerating the transnational nature of economic activity (the extent to which capital is now able to transcend political territories). Accounting for the inherently spatial nature of embeddedness grounds economic activity in social, cultural and political processes. As opposed to institutional 'context,' embeddedness may be a better tool for analysing dynamic network relations which include a variety of non-firm actors. Weller, for example, has called for a notion of embeddedness that would 'appreciate the uneven and shifting character of embedded relations at multiple scales: that actors are engaged simultaneously in multiple (and sometimes competing) personal, organisational, territorial and political associations' – a conceptualisation rich with power (2006).<sup>vi</sup>

Smith et al. insist that the concept can only be useful if the 'political-economic dynamics within which GPNs are embedded' are fully accounted for (2014:1027) and more recently have suggested that this can be done within a conjunctural economic geography (Pickles et al., 2016). Jones, meanwhile, contends that among other deep-rooted epistemological problems, embeddedness implies a false separation between the economic and 'non-economic' (2008). With relation to development, the Polanyian interpretation (Hess, 2004) has risked treating embeddedness solely as a positive 'social' counter to negative 'market' logic. Indeed, the idea of attracting and retaining global capital (i.e. 'strategic coupling' to attain the social good of development) has been framed in terms of territorial embeddedness - and as inherently positive. As Sayer has pointed out, however, embeddedness 'often involves relations of domination, some of them based on gender, class or race' (2001) and Glassman's contribution

(2011) demonstrates that such domination can include warfare. Hess (2004) does discuss the possibilities for embeddedness to be negative or positive. Yet this either/or assessment is insufficient: questions around *who* benefits from and who is harmed by particular changes (in this case by the activities of firms in GPNs), and according to whom, are at the core of debates around development.

### 5. *Development*

Given that the GPN approach is ‘an explicit attempt to break with state-centric conceptualizations’ of development (Henderson et al., 2002), the conceptualisation of development within the GPN approach must be interrogated. Without defining development, the GCC/GVC/GPN literatures have endorsed particular development strategies and policies. Industrial upgrading – moving into higher value production – has been promoted within the GCC framework as a means of facilitating development through enhanced profitability (Bair and Gereffi, 2003). Within the GPN approach, it has been suggested that states and regions should engage in ‘strategic coupling’ with firms (Coe et al., 2004; Yang, 2009; Yeung, 2009; Jacobs and Legendijk, 2014). Further, it has been argued that environmental and social upgrading – which minimises harm and/or creates benefits for workers, communities, particular social groups and the environment – is as important as industrial upgrading (Barrientos et al., 2011b; Riisgard et al., 2010<sup>vii</sup>).

These policy prescriptions have been subject to critique. At a general level, Murphy and Schindler have argued that ‘GPN research ... falls short in explaining how regions actually translate ties to global markets into local development outcomes’ (2011:81). More specifically, it has been pointed out that *decoupling* can be a useful strategy (Horner, 2013), and that

‘downgrading’ is possible (Gibbon and Ponte, 2005). Strategic coupling has been critiqued for underplaying unequal power relations and their consequences (Mackinnon, 2012) and for employing an ‘elite conception’ which fails to prioritise workers’ own struggles (Selwyn, 2013; see also, from a dis/articulations perspective, Werner, 2012; Havice and Campling, 2013; Goger, 2013a). Upgrading of all types has been framed as a process of improvement rather than one involving conflict over resources. More fundamentally, policy recommendations on how to achieve development call into question the understanding of the state: critiques have emerged around a failure to recognise the fragmented, historical and contested nature of the state within the wider geopolitical landscape (Smith, 2015; Glassman, 2011).

While specific policies for development have been debated, the nature of ‘development’ as a social good has on the whole been left oddly unproblematised. The notion of social and environmental upgrading defines development as inclusive of well-being rather than just economic growth, but even this distinction is not always made within the GPN literature.

Unfortunately, the somewhat belated definition offered in GPN 2.0 for ‘the ultimate dependent variable’ (Coe and Yeung, 2015:67) is an extremely narrow one. Coe and Yeung state that they focus on ‘*economic* development rather than development more generally’ and that they do not ‘frame development in terms of what Hart calls “big D” Development – namely a post-war project of state-sponsored intervention in the developing world set against the backdrop of decolonisation.’ Their definition, instead, is a ‘process that results in the improvement of economic conditions within a particular territorial unit’ (2015:167). The critical question of who determines whether there has been an ‘improvement’ is left to the side. Questions of distribution presumably follow those of economic growth. This is a shutting down of the

questions of development within GPN analysis raised by Hess (2009). It represents a steadfast refusal to acknowledge the contested nature of development and myriad debates within development geography, development studies and development policy - in spite of the fact that the purported *raison d'être* of GPN analysis is to bring about development.

The conceptualisation of development in GPN 2.0 is consequently flawed in three ways. First, it attempts to isolate economic development from the 'social, cultural and environmental dimensions of human existence.' This focus on the 'economic' (more on this below) is arguably more restricted than that of institutions such as the World Bank. As part of its proclaimed efforts to stimulate development, the World Bank now addresses biodiversity, climate change, public health, access to the law, gender inclusion and social protection, among other matters. The United Nations Millennium Development Goals and Sustainable Development Goals are also indicators that currently dominant understandings of development are far more expansive than that employed in GPN 2.0. The practical contestation over these meanings of development and how it is to be achieved – as evident, for example, in changes made to the labour-related aspects of the World Bank's *Doing Business Report*<sup>viii</sup> - are ignored. Analytically, the wide and diverse literature on sustainable livelihoods (Chambers, 1987; Ellis, 2000; Scoones, 2009) is disregarded. The presumed mechanism of development within much of the GPN literature appears to be that it depends on the creation and subsequent distribution of value. But the question of distribution which may be inferred from the notion of value capture is not one which necessarily *follows* the creation and capture of value. For distribution may be inherent to forms of (re-)production; as Ferguson has powerfully argued, questions of how to use (or refrain from using) land are often questions about distribution (2013).



Second, in proposing to analyse ‘small d’ but not ‘big D’ development, GPN 2.0 elides the ways in which the two are inextricably linked. An essential starting point is to recognize how big ‘D’ facilitates small ‘d’ d/Development – that is, how the development industry (broadly conceived) has justified and concretely negotiated capitalist expansion. One example of this is that privatisation. As described above, privatisation may be understood as entailing undervaluation and (consequently) transfers of value. This has been a key aspect of structural adjustment programmes imposed by institutions such as the World Bank and the International Monetary Fund. Third, and closely linked to the former points, the attempt to focus on the ‘material’ rather than the ‘discursive’ again elides the way that these are co-constituted (a point I return to below).

### **III. Dis/articulations and d/Development**

The dis/articulations perspective has been introduced by Bair and Werner (2011a) as a new approach to commodity chain analysis. It starts from the premise that the GPN approach and its predecessors exhibit an ‘inclusionary bias’ by cordoning off exclusions, withdrawals, ruptures and expulsions from the picture. The dynamics of inclusion and exclusion, i.e., the ways that the inclusion of some depends upon the exclusion of others, are central to the dis/articulations perspective. The dis/articulations perspective argues that ‘the politics of *disinvestment*, *devaluation*, place-making and subject-making’ actually ‘make production possible’ (Bair and Werner, 2011a, emphasis added). Exclusions are not the sole focus of the dis/articulations perspective. Rather, it is the ongoing interplay, ‘the relationship between inclusion and exclusion as ongoing processes that are constitutive of commodity chains’ (Bair and Werner, 2011a:992) that is of interest in examining ‘the conditions that enable commodity circuits to

form and reform over time (Bair et al. 2013:2544).’ However, in making these exclusions and ruptures central to the analysis, the dis/articulations perspective also reflects critical understandings of development, draws on the work of Hall and as a consequence allows for consideration of discourse, and actively theorizes b/orders.

To begin with, then, *articulations* are about links and connections across difference. Historically contingent but critically important relations among economic, social, cultural, and political practices are not seen as pre-determined: the relations forged may sustain such practices, erode them or transform them. This holds also for connections made across borders, and for links among different forms of labour (e.g. household, waged, volunteer, bonded, etc.). Faier, for example, shows how the matsutake commodity chain involves ‘processes in which variously situated ecologies collide across relations of geographical and cultural difference’ (2011).

Beyond an empirical focus on disinvestment and other forms of disconnection, the theoretical commitments of the dis/articulations perspective locate the analysis of the globalisation of production – or more widely, of capital – within critical theorisations of globalisation and development. While Coe and Yeung wish to ‘shed any remaining legacies of the world-systems theory that may linger in the literature on global production’ the dis/articulations perspective attempts a critical excavation of this legacy. They invoke a tradition based on Hopkins and Wallerstein’s (1977) work on commodity chains within World Systems (WS) theory, which in turn influenced Gereffi’s (1994; 1995) choice of terminology. While there is a push for recentring WS within commodity chain analysis (Bair, 2015), WS is not adopted wholesale within the dis/articulations perspective. Dis/articulations engages substantively, for example, with the Marxian concept of primitive accumulation (discussed above),<sup>ix</sup> offering a vision of

development which differs from much of the GPN literature, and certainly from 'GPN 2.0'.

While Hess acknowledges 'tensions' and references the post-development literature (Hess, 2009), the GPN approach has for the most part failed to acknowledge that a range of projects in the name of development may, in practice, represent underdevelopment (Frank, 1966; see also Escobar, 1995), dedevelopment (Roy, 1987) or maldevelopment (Shiva, 1988; Amin, 1990). The dis/articulations perspective not only questions the trajectories of capitalist development by suggesting that they inevitably involve disinvestment, but also acknowledges that while some may benefit from opportunities to participate in market relations, others may suffer as a result of the expansion of capitalist relations.

Hess further argues that 'states, non-state organisations and civil society' should be seen as 'drivers' of 'accumulation and ... uneven development' along with firms (Hess, 2009). But a conceptualisation of development which recognises it as frequently entailing dispossession implies that these actors also potentially have legitimate cause to *resist* projects of development. Regardless of whether resistance is discursively framed as anti-development or as a fundamental transformation to the concept of development, this is still a far different role for civil society and state actors vis-à-vis GPNs than is currently acknowledged in the GPN literature. It is indeed telling that mainstream development institutions have incorporated the GVC framework into their *existing* visions of development and the means to achieve it (Ravenhill, 2014; Neilson, 2014) and that this is welcomed uncritically within GPN 2.0 (Coe and Yeung, 2015:1). Hough, in contrast, considers (from a dis/articulations perspective) the different modes of accumulation and models of *development* imposed by sequential regimes in the Caguán region of Colombia as facilitating waves of integration into different commodity

chains, thereby pointing to the importance of the ‘political-ideological orientation of the state or state-like entity’ alongside ‘relations of force and domination’ (2011:1031-1032).

Critical readings of d/Development within the dis/articulations perspective align with alternative understandings of *value*. Bair and Werner (2011b), for example, situate the blue jeans manufacturing boom and bust in La Laguna, Mexico within shifting trade regimes under the North American Free Trade Agreement and the (end of the) Multi-Fibre Arrangement; but they also trace a longer history of engagements with the ‘cotton-textile-apparel’ commodity chain and its interlinkages with land reform and counter-reform, processes in which value is determined and transferred. Debbané (2013) examines how the deciduous fruit industry in South Africa’s Ceres valley has been increasingly integrated into global commodity chains. She shows how this has depended on the production and circulation of water which has been marked by a history of racialized processes of dispossession and displacement shaping post-apartheid nationalization. Finally, Brown (2013) examines Fairtrade certification in the Urabá region of Colombia as ‘contingent upon multiple forms of marginalization and devaluation.’

#### **IV. Borders and boundaries**

##### *1. Borders*

The GPN literature describes firms, workers, and places as ‘connected,’ ‘bound together,’ ‘integrated’ or ‘strategically coupled’ and employs the notion of embeddedness (discussed above) to contemplate the effects of actors being immersed in various networks, territories and societies. Yet remarkably little is said about the borders which need to be traversed in forging such connections and how these structure the nature of embeddedness. Some have argued that economic globalisation is a process in which borders have increased their ‘degree of

permeability' (Soja, 2005:36), while Henderson et al. make a distinction between 'business agents (who) are able to transcend political or other borders ... between territories' and 'most of the non-business institutions' which 'are bounded – and thus restricted – by their spatial contexts.' (2002:447-448). Yet it is not simply a question of either transcending or being trapped by borders but of the unequal effects of crossing them, and therefore of the diverse and complex ways that borders are reconstituted through 'globalisation.' Thus '... rather than constitute barriers or obstacles to globalization, boundary-making practices should be conceived as inescapable features of the globalization process' (van Houtum et al., 2005:5) or as Mezzadra and Neilson put it, 'far from serving to block or obstruct global flows, (borders) have become central devices for their articulation' (2013:6).

Space does not allow for full consideration of the ways that GPN literature might benefit from engagement with the literature on borderwork, borderlands, borderscapes, territoriality, liminality, etc. A fundamental starting point, however, would be a recognition of the centrality of borders to GPNs. As an alternative to (or complementing) notions of *embeddedness*, articulation may be employed to highlight how the act of border-crossing itself is constitutive of power relations, that actors in GPNs are enmeshed in power relations partially structured by borders. Embeddedness seems to imply a temporal aspect, with actors transformed by the relations which develop *after* they 'transcend' borders to arrive in a place, but transformation may also occur through the *process* of crossing borders which forms *part* of their arrival (and potentially their departure). Companies crossing borders may be transformed into 'foreign investors' or even agents of 'development.' Some individuals may be transformed into 'foreigners,' 'immigrants,' or even 'illegals' – while others may become 'European,'

‘cosmopolitan,’ or (through leveraging their wealth to access particular types of visas) even ‘entrepreneurs.’

Borders shape the value of labour (or labour-power) in myriad ways. Different currencies, public goods, laws and social norms reshape the value of both capital and labour the moment a border is crossed. Migration regimes also clearly shape the social constitution of labour’s value. The frequently racialised bodies of (particular) migrants, most notably when they cross territorial borders and are subject to immigration restrictions, are imagined as bearers of less valuable labour. On the other hand, migrants make use of borders in creating remittance streams, and social movements challenge and seek to transcend borders in productive ways. If political and state borders as physical demarcations of territory are an attempt to establish divisions on the ground, to exercise control and order space (Novak, 2011), this can again be through shaping their terms and conditions of entry and exit rather than simply including or excluding them. The discursive constructions noted above are therefore aligned with material effects: land rights, tax breaks, and other incentives often granted to border-crossing capital stand in contrast with the difficulties created for particular migrants, who at the extreme may be subject to violence and imprisonment (‘detention’). While states may be hard pressed to control who is included and excluded - however much they build walls, construct fences, or employ body scanners - they often have considerable capacity over defining the terms of incorporation. Policy and practice at all scales, including the global, shape the transformations actors undergo through their border crossing. Thus borders ‘regulate and structure the relations between capital, labor, law, subjects and political power’ (Mezzadra and Neilson, 2013:8). Or as Novak puts it, ‘Networks not only “contrast” state-centred hierarchies of

bounded territories, but ... are generated, and in many cases made possible, by such inscription...' (2011:746).

With regards to GPNs, borders are consequently devices which structure *power* relations and GPNs should be understood as articulated through borders. This is perhaps clearest in considering the explosion of Special Economic Zones (SEZs, a/k/a Free Trade Zones, Export Processing Zones, etc.) which have enabled the formation of GPNs. SEZs are a very particular means of 'b/ordering' (Berndt and Boeckler, 2009) which locate production simultaneously within and outside a nation. Such regulatory spaces (now frequently legal spaces rather than physically cordoned off areas) offer concessions on taxes and tariffs to attract export-oriented companies. There are an estimated 3,500 EPZs in 130 countries employing 66 million people. While wages tend to be relatively high in EPZs, the relaxed regulatory environment they offer, in which labour rights and standards are usually not enforced, means that jobs in EPZs also tend to be characterised by relatively poor health and safety conditions, excessive overtime and violations of freedom of association (Milberg and Amengual, 2008). Thus SEZs 'connect' labour and capital but on particular terms (see, for example, Arnold and Pickles, 2011).

The various functions and characteristics of borders are not fully aligned, and undergoing constant challenge and transformation; they are thus heterogeneous. Berndt and Boeckler thus theorise borders within the dis/articulations perspective via 'a mobile fresh tomato that is produced in the Global South and moves north,' illuminating processes of bordering and debordering, conceived respectively in terms of framing (which fixes the object according to a particular logic) and overflowing (in which the framing fails or falls short). The 'network tomato' subsequently 'cross(es) borders but also carr(ies) borders with it' (2011).

The above discussion already hints at how territorial borders are also boundaries which form 'part of the practice and narratives by which social groups are constituted and the members of these groups are governed' (Paasi, 2005:20). Territorial borders are (tenuously) co-constructed with social and cultural boundaries, helping to produce and reshape racial and ethnic categories and playing a central part in the creation or division of communities. The study of borders and of boundaries are thereby closely linked (Jones, 2009).

## *2. Boundaries*

Drawing on the work of Hall, discourse and ideology are essential elements of the dis/articulations perspective. The dis/articulations perspective not only examines borders, therefore, but other forms of (often co-constituted) boundaries –boundaries of the economic and economic value, of capitalism and non-capitalism, and boundaries marking identities such as race and gender. Race is of course central to Hall's work but it is also a prominent concern of the articulation of modes of production literature with which he engages.<sup>x</sup> Hall further draws on Gramsci to elaborate a method for understanding the cultural within capitalism, and therefore to open space for discursive analysis (1996). As Hart explains, Hall 'extend(ed) the concept of articulation to encompass not only the joining together of diverse elements ... but also the second sense of articulation ... "to give expression to" or the production of meaning through language' (2007:91). Significantly for the analysis of capital vis-à-vis d/Development, Hall also argued that a Gramscian analysis of 'concrete relations' within specific historical conjunctures would be of particular relevance to 'colonial countries' (e.g. Hart 2007). The dis/articulations perspective reinvigorates Hall's contributions through an explicitly geographic lens:

It is not only the work of linking up constructions of social difference with processes of valuation and capital accumulation, but also that of reproducing



geographical difference by linking and delinking places to commodity chains that are formed and reformed through these moments of connection and severance. (Bair and Werner, 2011a: 993)

Berndt (2013) shows how the imagined boundaries between economy and non-economy (which Coe and Yeung's definition of 'economic development' seems to take for granted) and between market and non-market – and the way these divisions are constructed (see Mitchell, 2005; Mackenzie et al., 2007; Mitchell, 2008)<sup>xi</sup> – are intertwined with spatial 'b/ordering.' In order to be subject to a process of d/Development, Lomas del Paleo (on the outskirts of Ciudad Juárez in Mexico) must be first imagined as 'backward' and 'underdeveloped,' as 'a place of little or no value ... eras(ing) a rich history of social life ... with residents raising chickens and other animals, planting vegetables and fruits, running small grocery stores, going to church, and so on' (Berndt, 2013:2654). B/ordering, then, is both spatial and discursive, and part of contested processes of value determination.

B/ordering as a spatial and discursive practice has material effects because '... boundaries are also social symbols and institutions, and hence instruments in the creation of meaning and interpretations of the world' (Paasi, 2005:23). Divisions of the world into 'developed' and 'developing' - with all the imagined differences between them - are made with reference to territorial borders: 'the modern histories of borders and of development intersect ... (through) a colonial institution (borders), a colonial state project (development) and diverse populations, entangled in ways that continue to reverberate to this day' (Novak, 2016:485). As meaning-making devices, political/state borders are one of the discursive and conceptual boundaries central to the social constructions by which we order the world.

As should be clear by now, this formulation enables acknowledgement of how labour is differentially valued through 'constructions of social difference based on interlocking and overdetermined hierarchies of race, gender, nation, and class' (Bair and Werner, 2011a: 991). In treating GPNs as constructed discursively and involving practices of gendering and racialisation, the dis/articulations perspective demonstrates that 'value is not only produced through interfirm or firm-state relations, but is also determined by the labor process as it is shaped by legacies of colonialism, persisting hierarchies, and the everyday reproduction of social difference' (Goger, 2013b:2629). Yeh and Lama (2013) (whose work is situated within more-than-human geographies), show how 'representations of Tibetan nature in which the whole of Tibet is viewed as a kind of natural resource' have material effects on Tibetan harvesters (2013:322). Christian shows how race and gender play a role in who is able to 'gain from economic and social upgrading' in the tourism GPN in Kenya and how 'entrenched gendered and racial territorial divisions' are used to 'extract economic and symbolic value' (2015:27). Finally, Gutelius examines 'the creation of competitive hierarchies ... between and within temp agencies' with intermediaries 're-negotiating the boundaries and terms of inclusion in and exclusion from global production networks,' a task achieved only within the context of 'immigration policy, the criminal justice system, welfare policy, labor law, and markers of social, racial, and ethnic difference' (2015:54).

Questions of discourse and conceptual boundaries are not limited to questions of identity: the rise of GPNs can be seen as a marketisation of production, a reconfiguring of conceptual boundaries. Component parts, inputs, and intermediate goods are increasingly 'exchanged' prior to their incorporation into a final good that reaches consumers. Production can no longer

be separated from (international) 'trade,' and therefore from the idea of markets. The organisational (and spatial) separation in which different firms (and other actors) in GPNs carry out distinct aspects of production allows market logic to be applied to the relations among these actors – in spite of the fact that these rarely resemble market relations. This process creates (tenuous and contested) boundaries of responsibility which are in tension with the need for control over what is produced and on what terms. Subsidiaries, holding companies, associate companies, shell companies, and multiple crossovers through investment and directorships are all forms of partial separation among closely linked economic entities, reflecting these tensions. Buyers may be interested in bridging distance when communicating their demands around quantity, timing and quality to suppliers but maintaining distance when negative social and environmental consequences of production are highlighted (Tsing, 2009). The proliferation of market intermediaries – in finance and credit provision (see Johnson, 2013 on index insurance), in ethical sourcing (Hughes et al., 2008), and in labour recruitment and relations (Barrientos, 2013; Picherit, 2009; Coe et al., 2007; Coe et al., 2009) – is in part a way of managing such tensions.<sup>xii</sup> Intermediaries bring GPN actors together while holding them apart, creating a combination of proximity and distance. Intermediaries not only allow actors to traverse 'the distance between "here and there"' or link 'actors directly to other places and times' but also enable 'those physically distant in space and time to be, somewhat paradoxically, both absent and present in terms of their authority and influence'<sup>xiii</sup> (Allen, 2011). It appears that intermediaries are becoming increasingly significant as they enable, in part through discursive means, this simultaneous proximity and distance.

## **V. Conclusion**

The GPN approach has built upon and responded to the GCC and GVC literatures through its inclusion of non-firm actors, offering a framework through which to analyse the fragmentation and dispersion of production. It also professes to be centred on the concepts of value, power and embeddedness, and normatively oriented towards the promotion of development. The openness of the framework has allowed for theoretical diversity such that the framework has been applied productively by a range of scholars to shed light on various aspects of GPNs. However, the elaboration of these core concepts has been uneven, perhaps due to the very same theoretical diversity, as various scholars have either failed to engage with this task or interpreted the concepts in radically different manners. The concept of development, central to the approach, has been left undefined until recently, while GPN 2.0 now offers an impoverished notion of development.

The dis/articulations perspective, on the other hand, is rooted in a critical interrogation of development, viewing d/Development as an historically situated, contradictory and contested process. It further examines processes of b/ordering, drawing together a focus on the multiple and dynamic role of territorial borders with (often intertwined) discursive and ideological processes of drawing cultural and social boundaries. This perspective engages with the geographic literature on the performativity of economics, and it also highlights the centrality of gendering, racialisation and analogous practices. Acts of border-crossing, discourses and projects of d/Development, delineations of the economic, race and gender are all powerfully implicated in the ways that value is determined, power relations are structured, and forms of embeddedness are shaped. The discursive is thus shown to play a role in relation to value, power, embeddedness – and d/Development – with material effects.

Thus, the dis/articulations perspective opens up new areas of inquiry not only about the exclusions and ruptures necessary to the construction of GPNs but about the fundamental understanding of the entangled and dynamic relations between the globalisation of production (or rather the globalisation of capital) and d/Development. It is not yet clear to what extent the launching of GPN 2.0 will influence future GPN scholarship nor to what extent the dis/articulations framework will continue to be taken up – and therefore whether the GPN approach is at a crossroads. But I hope to have demonstrated that the dis/articulations perspective offers a pathway with greater potential for grappling with the contested notion of d/Development, and therefore for further elaborating the concepts of value, power, and embeddedness.

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<sup>i</sup> See Starosta 2010 for an argument in favour of Marxian understandings of value.

<sup>ii</sup> Though see Henderson 2013 for an alternative elaboration of Marxian understandings of value.

<sup>iii</sup> A mode of production is defined here as ‘the way in which people produce their means of subsistence’ (Miles 1987, p. 17).

<sup>iv</sup> See Hadjimichalis (1984) for a discussion of the Geographical Transfer of Value.

<sup>v</sup> In principle, GPN draws selectively on Actor-Network Theory (ANT) in this regard although in practice ANT’s influence within this literature is varied.

<sup>vi</sup> For debates on the theoretical status and understandings of embeddedness, see Jones 2008

<sup>vii</sup> See <http://www.capturingthegains.org/publications/workingpapers/> for a number of working papers using the concept of upgrading (and downgrading).

<sup>viii</sup> See:

<http://www.doingbusiness.org/data/exploretopics/~media/GIAWB/Doing%20Business/Documents/Miscellaneous/Final-EWI-CG-report-2011.pdf> accessed 25 February, 2016 (see also: Bakvis 2009; Benjamin et al. 2010; Lee et al. 2008; Berg and Cazes 2008).

<sup>ix</sup> Bair and Werner also (briefly) mention the articulation of modes of production (2011:92).

<sup>x</sup> Miles and Wolpe address the role of race in capitalism and vice versa. Wolpe argues that the ‘racial ideology’ of apartheid ‘sustain(ed) and reproduce(ed) capitalist relations of production’ (1972:454) while Miles argues for the concept of racism as a social relation of production (1972).

<sup>xi</sup> Ramamurthy’s contribution to the dis/articulations literature is salient in terms of the boundaries of the economy: smallholders’ decisions to grow cottonseed in spite of the prospects of accumulating debt rather than income are explained in terms of Dalits’ aspirational ‘non-economic’ calculus to grow the crop on ‘their own plots of land’ and ‘labor for themselves’ as a means of ‘rearticulating caste’ and moving beyond ‘prior humiliations’ (2011).

<sup>xii</sup> This may also be part of the reason for the rise of powerful first tier suppliers (Azmeah et al. 2015).

<sup>xiii</sup> Here Allen speaks of mediation rather than intermediaries but this is a fine distinction.